

at an angle to the horizontal, planar surface of less than 80° which reflects light from the source onto the vertical, planar surface, and the trap has an upwardly facing opening.

REMARKS

Applicants have received and reviewed the outstanding Office Action dated June 11, 1993. By way of response, Applicants have amended claims 1, 9, and 17 and have made limited amendments to the specification. The claims pending in the above-identified application are claims 1-25.

The amendments to the claims are supported through the specification. It is believed that no new matter is presented in the amendments to the claims or to the specification.

For the reasons given herein, it is believed that all claims are now in condition for allowance and notification to that effect is earnestly solicited.

35 U.S.C. § 112, Second Paragraph

The Examiner rejected claims 1, 9, and 17 under 35 U.S.C. § 112, second paragraph. The Examiner objected to certain claim language. Applicants have amended the language of these claims. It is respectfully submitted that the amended claims overcome these rejections.

The Examiner contends that, in claim 1, "the mounting means", the "horizontal surface" and the "vertical surface" lack an antecedent basis. Applicants have amended claim 1 to provide

proper antecedent basis and respectfully submit that this amendment overcomes this point of the rejection.

The Examiner contends that, in claim 9, the "horizontal surface" lacks antecedent basis. Applicants have amended claim 9 to provide proper antecedent basis and respectfully submit that this amendment overcomes this point of the rejection.

Also in claim 9, the Examiner contends that "vertical surface" is used to described two different elements. Applicants respectfully submit that the vertical surfaces referred to are the same. However, Applicants have amended claim 9 to clarify that relationship. Applicants respectfully submit that this amendment overcomes this point of the rejection.

The Examiner also contends that, in claim 9, the phrase "a one piece housing that on a vertical surface surrounds the same" is confusing. Applicants have amended this language to clarify the relationship between the housing and the vertical surface. Applicants respectfully submit that this amendment overcomes this point of the rejection.

In claim 17, the Examiner contends that the phrases "the horizontal surface" and "the source".lack an antecedent basis. Applicants have amended claim 17 to provide proper antecedent basis and respectfully submit that this amendment overcomes this point of the rejection.

The Examiner further contends that, in claim 17, the light can be viewed as it is shown in Figure 1. Applicants respectfully submit that Figure 1 represents a downward view into

the trap which is conveyed by the depiction of the vertical surface, #20 in the Figure.

Based on the above remarks, it is respectfully requested that the Examiner withdraw the 35 U.S.C. § 112, second paragraph rejections.

37 C.F.R. § 1.83(a)

The Examiner has objected to the drawings under 37 C.F.R. § 1.83(a) as not showing every feature of the invention specified in the claims. The Examiner contends that the housing is not shown in the figures. Applicants respectfully submit that the housing is clearly depicted in Figures 1 and 2, as feature 19. Applicants further submit that the specification describes the housing feature in the drawings at page 20, lines 14, 15, 19, and 24, and at page 21, line 7. Thus, Applicants respectfully request that the Examiner either clarify or withdraw this objection.

37 C.F.R. § 1.75(d)(1)

The Examiner has objected to the specification under 37 C.F.R. § 1.75(d)(1) as failing to provide proper antecedent basis for the claimed subject matter. Applicants have amended the specification to provide proper antecedent basis for the mounting means, i.e., placement means. Applicants assert that no new matter has been presented in this amendment, as the term "mounting means" is present throughout the specification. Thus,

it is respectfully submitted that this amendment to the specification overcomes this point of the rejection.

35 U.S.C. § 102(b)

The Examiner rejected claims 1-5 under 35 U.S.C. § 102(b) as being anticipated by Phillips. Applicants respectfully traverse the rejection.

Applicants' invention is directed to an insect trap utilizing insect attracting light and an immobilization surface, said trap providing for the display of light onto vertical, planar surfaces and horizontal, planar surfaces on which horizontal surface which the trap can be mounted. The trap also provides an upwardly facing opening for insect entry. The insect trap further comprises reflective surfaces which allow for light to be directed onto horizontal and vertical surfaces while containing the light source so that it is not directly visible.

In a preferred embodiment, the trap may be mounted on a wall near the ceiling. When mounted in this manner, the insect attractant light will be reflected and directly radiated onto the wall and ceiling providing a light pattern attractive to insects, while the light source itself will not be directly visible.

The Phillips reference discloses an insect trapping appliance which uses an ultraviolet light to attract insects and a disposable, sticky reflecting surface to trap them. However, the Phillips reference teaches a light source which may be viewed directly. Furthermore, the Phillips reference teaches a

horizontal arrangement that does not allow for reflection of light on two surfaces, nor does the arrangement allow the insects to enter the trap downward. Applicants respectfully submit that the Phillips reference does not teach or suggest each and every claimed feature of Applicants' invention and, therefore, is not a proper anticipatory reference. Thus, it is respectfully requested that the Examiner withdraw the rejection.

The Examiner rejected claims 17 and 20 under 35 U.S.C. § 102(b) as being anticipated by Robinson. Applicants respectfully traverse this rejection.

The Robinson reference discloses a insect trap which comprises a pan within which a lamp is centrally located. The pan may be filled with a fluid which is of sufficient strength to destroy insects, e.g. soap and water. The patent further comprises a non-reticulated plate which is adapted on top of a globe to serve as both a wind and rain shield for the globe and the lamp inside. The reference teaches a light source that is directly viewable, and provides no reflective surfaces nor surface to reflect upon. The Examiner contends that the wires that serve for hanging the insect trap act as vertical surfaces. Applicants respectfully submit that the vertical surface referred to in their application generally comprises a wall or other planar surface on which the light from the trap may be reflected. Applicants respectfully submit that the Robinson reference does not teach or disclose every claimed aspect of their invention and, therefore, is not a proper anticipatory reference. Thus, it

is respectfully requested that the Examiner withdraw the rejection.

Based on the above remarks, it is requested that the Examiner withdraw the 35 U.S.C. § 102(b) rejections.

35 U.S.C. § 103

The Examiner rejected claims 6-8 under 35 U.S.C. § 103 as being unpatentable over Phillips. The Examiner also rejected claims 18-19, 21, and 22-25 as being unpatentable over Robinson. Applicants respectfully traverse these rejections.

The prior art is replete with inventions directed toward insect traps. Although Applicants' invention is also directed to an insect trap, the invention is based on the surprising and unexpected increase of attractancy of flying insect pests that can be achieved by an improved geometry of the housing. Applicants' invention is also based on the discovery that insect attractancy can be increased through the use of a combination of diffused and reflected light. Applicants' specification discloses experimental data exemplifying this increase in the attractancy of flying insect pests attributable to these features. Furthermore, applicants' invention provides a means of utilizing this increased effectiveness while making the invention visually appealing to the public.

The Examiner has cited the Phillips reference with respect to claims 6-8. The Examiner concedes that Phillips does not disclose the use of a pheromone, a shiny metallic surface, or

a lethal electrified surface. However, the Examiner contends that it would have been obvious to one of skill in the art to utilize these features. Applicants respectfully submit that the Phillips reference would not suggest to one of skill in the art that a combination of reflected and directly radiated light would provide for greater insect attractance. Furthermore, there is no teaching within the Phillips reference to conceal the light source, thereby maintaining the trap's effectiveness while making it more visually appealing to humans. In the absence of these teachings, Applicants respectfully submit that the Phillips reference does not make obvious Applicants' invention.

The Examiner has cited the Robinson reference with respect to claims 18-19, 21, and 22-25. The Robinson reference discloses a light and a soap-plus-water solution to kill insects. The reference does not disclose the use of ultraviolet light nor does it disclose an adhesive nor a pheromone attractant. Furthermore, the reference teaches a light source which is directly visible. There is no teaching of the use of reflective surfaces to provide for a light pattern of diffused and direct light. The Robinson reference would not suggest to one of skill in the art that it would be beneficial to remove the light source from direct visual access, nor does the reference suggest that greater insect attractancy could be achieved utilizing reflective surfaces to provide reflected and direct light. Thus, Applicants submit that Robinson does not make Applicants' claimed invention obvious.

The Examiner has also made reference to patents issued to Yarmeli, Schneider, Weiment, Pohlman, and Snead. The Examiner has not rejected the claims of the present invention based on these disclosures, however, Applicants would again respectfully submit that none of these references disclose the use of the geometry of the housing to provide for a reflective and diffused light to be displayed in a pattern attractive to insects, nor do the references disclose a light source that is not directly visible. Applicants respectfully submit that, in the absence of these teachings, these references do not make obvious Applicants' invention.

Based on the above remarks, it is respectfully requested that the Examiner withdraw the 35 U.S.C. § 103 rejections.

Conclusion

It is believed that each of the claims 1-25 are in condition for allowance and notification to that effect is

earnestly solicited. The Examiner is encouraged to contact Applicants' representatives if prosecution may be assisted thereby.

Respectfully submitted,
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